

SOLAR



Presence sensor (light and motion sensor) Operating instructions

Description

Function and application

The "SOLAR" presence sensor detects the presence of people and measures the intensity of ambient light. The energy supply for the presence sensor is provided by solar cells or, if daylight or artificial light is insufficient, by batteries.

The radio control system is primarily used to extend existing electrical installations without additional cabling.

Function

The values measured by the presence sensor (motion, light value) are transmitted to the "Switch RC" radio receiver via a radio signal. The measured light value depends on the incidence of daylight, the artificial lighting and the properties of the surface (light/dark).

The presence sensor is only ensured to function in combination with the radio receiver. All switching functions and parameter settings of the presence sensor are executed via the radio receiver.

The following parameters can be set for every presence sensor programmed for the radio receiver:

- Delay (switch-off delay time if no motion is detected)
- Light value
- Mode

Note:

More information on the parameter settings can be found in the separate instructions for the "Switch RC" radio receiver.

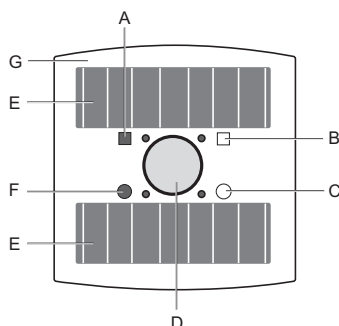
Energy supply from solar cells/batteries

If daylight or artificial light is sufficient, the sensor is powered by solar cells.

For immediate operation, the energy storage unit must first be charged for approx. 5 minutes at a minimum of 50 – 100 lux. For light value measurement to function properly, the energy storage unit must be charged for several days at a minimum of 50 – 100 lux.

The "Test" button can be used to check the operational readiness of the presence sensor; see "Testing the operational readiness".

The presence sensor can optionally be operated with batteries if, for example, the sensor is located in a room with a very low light value (< 50 lux).



Construction

The presence sensor is made up of the following components:

- "LRN" button (A) for programming the presence sensor for the radio receiver
- "Test" button (B) for sending a test signal
- Light sensor (C)
- Motion sensor (D)
- Solar cells (E)
- "Test" LED (F) for monitoring the operational readiness
- Housing (G) with battery compartment

Operation

Note

The presence sensor cannot be used to manually switch the lighting on and off. Because all switching functions and parameter settings of the presence sensor are executed via the "Switch RC" radio receiver, the function of the presence sensor is only ensured in combination with the radio receiver.

Programming the sensor for the radio receiver

The presence sensor can be programmed for a radio receiver and can be deleted again.

Proceed as follows:

- ① Activate the programming mode of the radio receiver; see the separate instructions of the "Switch RC" radio receiver.
- ② Press the "LRN" button.

Then proceed as follows if persons were located within the detection area when the presence sensor was being programmed:

- ① Ensure that all persons leave the detection area of the presence sensor.
- ② Enter the detection area again after at least 2 minutes elapse.

Result: The presence sensor sends an ON signal and functions properly.



Operation (cont.)

Testing the operational readiness

For solar operation, the energy storage unit must be sufficiently charged; see "Energy supply via solar cells/batteries".
To check the operational readiness, proceed as follows:

- ① Press the "Test" button.
The presence sensor sends a test signal.
- ② Check whether the "Test" LED is lit up.
 - LED is lit: the presence sensor is operational.
 - LED is not lit: the presence sensor is not operational.
- ③ Continue charging the energy storage unit if the presence sensor is not yet operational.

Replacing the batteries

The batteries need to be replaced every 5 – 7 years.
Proceed as follows:

- ① Open the battery compartment on the back of the presence sensor.
- ② Remove the old batteries.
- ③ Insert the new batteries (1.5 V Micro AAA), ensuring that the polarity is correct.

Troubleshooting

If you cannot remedy the fault, please contact the customer service department of the manufacturer.

The device is not functional.
Is the energy storage unit sufficiently charged?

The device is functional, but the switching functions are not being carried out.

- Is the device correctly programmed for the radio receiver?
Note: See the separate instructions for the "Switch RC" radio receiver.
- Is the radio receiver switched off?
- Has the functional range been exceeded?
- Are the radio signals being disturbed by metal objects?

The device is carrying out an undesired functional mode.
Is the "Mode" parameter on the radio receiver set correctly?
Note: See the separate instructions for the "Switch RC" radio receiver.

The setpoints of the functions are not being reached.
Are the "Time" and "Light value" parameters on the radio receiver set correctly?
Note: See the separate instructions for the "Switch RC" radio receiver.

Appendix

Technical data

Transmission frequency	868.3 MHz
Power supply	Solar cells (min. 50 - 100 lx) 2 batteries (to 50 lx) <ul style="list-style-type: none">• 1.5 V Micro AAA• Service life: 5 – 7 years
Charge time for immediate operation	Approx. 5 – 10 minutes
Operating temperature	+10 °C ... +50 °C
Protection class	IP 50
Dimensions (L x W x H)	108 x 108 x 26.8 mm
Functional range	Wood / drywall: 30 m (max. 5 walls) Masonry: 20 m (max. 3 walls) Reinforced concrete: 10 m (max. 1 wall/ceiling)

Dimensioned drawing

